

REMARKS

Claims 35-49 have been canceled in favor of new claims 50-70, as further supported by the claims and specification as originally filed.

No new matter has been introduced. Entry and favorable consideration are requested.

The rejection of the claims under 35 U.S.C. § 103(a) as being obvious over Hasenzahl '112 (U.S. Patent 6,054,112) in view of Hasenzahl '430 (U.S. Patent 5,919,430) is traversed.

The claims include a feature of bringing a solid material and/or shaped body into contact with deionized water at a temperature between 120°C and 175°C.

Hasenzahl '112 and Hasenzahl '430 fail to disclose or suggest bringing a solid material and/or shaped body into contact with deionized water at a temperature between 120°C and 175°C. This also applies to EP 0 200 260 and EP 0 405 978 which were mentioned in the Final Office Action (see bridging paragraph on pages 4 and 5). Said documents teach conventional washing steps with water, i.e. washing steps which, in the absence of any further information, are respectively performed at room temperature (EP 0 200 260: e.g. col. 4, lines 48 to 52; EP 0 405 978: e.g. page 5, lines 43 to 45).

Furthermore, the object of the present invention was to provide a solid material and a process for its preparation, wherein said solid material displays improved catalytic properties. It has surprisingly been found that by applying at least one step of contacting a zeolite containing solid material or shaped body with deionized water at a temperature between 120°C and 175°C, an epoxidation catalyst is obtained with significantly improved long-term selectivity towards propylene oxide and displaying lower rates of oxygen formation compared to a solid material which has not been treated in this fashion. In this respect, please

note the experimental results of Example 3 compared to those found for the Comparative Example on pages 23 and 24 of the description.

In Example 3, oxidation using the shaped body of the present invention was performed. The analysis of the product mixture emerging from the reactor resulted in that after 96 hours, the selectivity for propylene oxide (with respect to H_2O_2) was 96.4%. After 416 hours a selectivity of 96% was measured. The formation of oxygen (selectivity with respect to H_2O_2) was measured to be 0.6% after 96 hours and 0.6% even after 416 hours.

In the Comparative Example, using a catalyst that has not been subjected to the treatment (W, treatment with deionized water) given in Example 1, the following values have been obtained for the selectivity (under otherwise equal conditions): after 90 hours the selectivity of propylene oxide (with respect to H_2O_2) was 96.5%. After 427 hours a selectivity of only 91.3% was measured. The formation of oxygen (selectivity with respect to H_2O_2) was measured to be 0.6% after 90 hours but already 1.3% after 427 hours.

None of the cited references disclose or suggest the superior properties obtained with the present invention.

Withdrawal of this ground of rejection is respectfully requested.


In conclusion, Applicants submit that the present application is now in condition for allowance and notification to this effect is earnestly solicited.

Respectfully submitted,

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